

SUPERFUND RESPONSE ACTION PRIORITY PANEL REVIEW FORM

Date Form Completed: 2/22/2012

General Site Information

Region:	Region 4	City:	Atlanta	State:	Georgia
CERCLIS EPA ID:	FLD012978862	CERCLIS Site Name:	Alaric Area GW Plume		
NPL Status: (P/F/D)	F	Year Listed to NPL:	2000		

Brief Site Description: *(Site Type, Current and Future Land Use, General Site Contaminant and Media Info, Site Area and Location information.)*

The Alaric, Inc. Superfund Site (Alaric) is located in the Orient Park industrial sector at 2110 North 71st Street in Tampa, Hillsborough County, Florida. The site is approximately 1.7 acres in size and is located in an urban area with mostly commercial properties. Land use in the Orient Park area consists primarily of industrial properties, commercial buildings, and sparse intervening residential dwellings. This land use scenario will likely persist into the foreseeable future. The Helena Chemical Company (HCC) also known as the Helena Superfund Site, wraps around Alaric to the east and south. A 3-acre vacant wooded parcel owned by HCC is located directly south/southwest of the Alaric Site. Other Superfund sites in Orient Park include Stauffer Chemical and Helena, both of which border Orient Road.

The Site was added to the USEPA NPL on December 1, 2000. The risk posed by ground water contaminated with tetrachloroethylene (PCE), Trichloroethene (TCE) and related compounds was the primary reason for listing the Site. Municipalities in this part of Florida utilize ground water as the source for municipal drinking water. The closest City of Tampa well is approximately 1.25 miles from the site.

Various businesses have operated at this property from 1973 until the present. From 1981 until 1992, Alaric Inc. operated a plastics recycling facility. The exact nature of the operation is unknown, however, it is reported that PCE was stored in a bulk tank onsite for the purposes of removing paints from plastics prior to recycling. Based on the investigation of the onsite septic system, it appears that waste solvents were disposed of into the septic system which was eventually discharged into the subsurface. Currently, the Alaric Site is owned by Mr. Lee Oglesby's trust and is currently leased to the Street Sweeping Corporation of America, which operates a fleet of street sweepers. Although various petroleum products are used to maintain the fleet of trucks, no chlorinated solvents are involved in their operations.

General Project Information

Type of Action:	Remedial	Site Charging SSID:	A4E3
Operable Unit:	OU1	CERCLIS Action RAT Code:	CO
Is this the final action for the site that will result in a site construction completion?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Will implementation of this action result in the Environmental Indicator for Human Exposure being brought under control?			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Response Action Summary

Describe briefly site activities conducted in the past or currently underway:

In 1986, the Hillsborough County Public Health Unit identified PCE and TCE in an onsite water supply well. A large scale investigation of the Orient Park area identified OCE and TCE in the vicinity of the Alaric Site.

In 1988 and 1997, FDEP conducted investigations of this site, and documented the presence of elevated levels of VOCs in the groundwater.

Investigative work by EPA began in April 2000 and concluded in September 2000. The results of the RI documented elevated levels of chlorinated VOCs in the shallow soil down to the top of the Hawthorn Group. A large plume of contaminated groundwater was documented in the surficial aquifer and downward into the upper portion of the Floridan aquifer. This plume has migrated well beyond the Alaric property onto the Helena Chemical property and other properties to the south. Results from the investigation of the septic system documented the presence of elevated levels of PCE in the septic tank and drain field.

On July 23, 2002 EPA signed an Interim Record of Decision (IROD) for the Alaric Inc. Superfund Site, designed to mitigate the lingering source of groundwater contamination and to control the migration of the contaminated groundwater plume. These objectives were addressed through the construction of a Pump and Treat system, and an active source remediation via In-situ Chemical Oxidation.

Subsequent soil investigations indicated that the source treatment, ISCO, was unable to meet the remedial goals set forth in the 2002 IROD. As such, a Phase II RI/FS was conducted and completed in December, 2009. The results of the Phase II RI/FS led to the issuance of an Amendment to the IROD (AROD), which changed the selected interim remedy from ISCO to In-situ Thermal Remediation (ISTR).

A Remedial Design for the remedy selected under the AROD, ISTR, was initiated in November, 2011, and is scheduled to be completed by March 31, 2012. As of February 22, 2012, the RD is 60% complete.

Specifically identify the discrete activities and site areas to be considered by this panel evaluation:

As described in the 2010 AROD, the selected remedy will include the following major components:

- Demolition of the existing septic tank and drain field
- Relocation of the septic tank and drain field to an alternate location,
- Limited tree removal and mitigation,
- Fence removal,
- Installation of approximately 36 thermal heating wells to a depth of 35 ft. bls, assuming a 15 ft-well spacing
- Installation of approximately 520 ft of horizontal SVE laterals at 2 ft. bls,
- Installation of aboveground vapor phase treatment system: vacuum blower, heat exchanger, carbon absorption unit,
- Modification of existing P&T system with installation of water/(NAPL) phase treatment system,
- Installation of power trailer and control trailer
- Implement In-Situ Thermal Remediation for an estimated 280 day-treatment period
- Real-time performance monitoring of thermal enhancement with downhole thermocouples
- Performance monitoring of multiphase influent and treated effluents
- Restoration of fencing and surface features
- Long-term performance monitoring
- Continue ICs to prevent groundwater usage within plume until MCLs are met
- Monitoring period of three years to assess the impact, and to determine if further action is warranted.

SUPERFUND RESPONSE ACTION PRIORITY PANEL REVIEW FORM

Briefly describe additional work remaining at the site for construction completion after completion of discrete activities being ranked:

Construction completion was taken at this site in FY2003

Response Action Cost

Total Cost of Proposed Response Action:

(\$ amount should represent total funding need for new RA funding from national allowance above and beyond those funds anticipated to be utilized through special accounts or State Superfund Contracts.)

\$ 2,662,250 * 0.90 (State SSC) = \$2.396 M

Source of Proposed Response Action Cost Amount:

(ROD, 30%, 60%, 90% RD, Contract Bid, USACE estimate, etc...)

60% RD

Breakout of Total Action Cost Planned Annual Need by Fiscal Year:

(If the estimated cost of the response action exceeds \$10 million, please provide multiple funding scenarios for fiscal year needs; general planned annual need scenario, maximum funding scenario, and minimum funding scenario.)

FY13: \$2.396 M

Other information or assumptions associated with cost estimates?

Readiness Criteria

1. Date State Superfund Contract or State Cooperative Agreement will be signed (Month)?

September 2012

2. If Non-Time Critical, is State cost sharing (provide details)?

N/A

3. If Remedial Action, when will Remedial Design be 95% complete?

The RD is scheduled to be completed by May 31, 2012, and is currently 60% complete, as of February 22, 2012

4. When will Region be able to obligate money to the site?

October 2012

5. Estimate when on-site construction activities will begin:

SUPERFUND RESPONSE ACTION PRIORITY PANEL REVIEW FORM

Construction activities would be contingent upon funding, but site prep work could begin as early as Fall 2012, which would take three months to complete, and construction could begin shortly thereafter.

6. Has CERCLIS been updated to consistently reflect project cost/readiness information?

Yes

Site/Project Name: Alaric Area GW Plume

Criteria #1 - RISKS TO HUMAN POPULATION EXPOSED (Weight Factor = 5)

Describe the exposure scenario(s) driving the risk and remedy. Include risk and exposure information on current/future use, on-site/off-site, media, exposure route, and receptors:

Future Adult Resident:

Cancer Risk = $1.4E-01$ (attributable to ingestion of GW and inhalation of VOCs while showering)

HI = 2381 (attributable to ingestion of ingestion of GW and inhalation of VOCs while showering)

Future Child Resident

Cancer Risk = $8.1E-02$ (attributable to ingestion of GW and inhalation of VOCs while showering)

HI = 5555 (attributable to ingestion of ingestion of GW and inhalation of VOCs while showering)

Future Industrial Worker

Cancer Risk = $2.6E-02$ (attributable to ingestion of GW)

HI = 743 (attributable to ingestion of ingestion of GW)

Future Construction Worker

Cancer Risk = $1.0E-03$ (attributable to ingestion of GW)

HI = 743 (attributable to ingestion of ingestion of GW)

Future Construction Worker (Excavation Scenario)

Cancer Risk = $7.6E-04$ (attributable to ingestion of GW, inhalation of VOCs, and Dermal Contact)

HI = 148 (attributable to ingestion of ingestion of GW, inhalation of VOCs, and Dermal Contact)

Estimate the number of people reasonably anticipated to be exposed in the absence of any future EPA action for each medium for the following time frames:

<u>MEDIUM</u>	<u>≤2yrs</u>	<u>≤10yrs</u>	<u>>10yrs</u>
GW	<100	<100	<100

Discuss the likelihood that the above exposures will occur:

The likelihood of the above exposures is relatively low, given that the primary exposure is through the ingestion of contaminated groundwater and the inhalation of VOCs while showering. Both of these scenarios rely upon the use of private wells, which are not in use in the Orient Park area. Based on available well surveys, there are fewer than 10 private wells within the vicinity of the Alaric Site. Migration of the plume to affect municipal wells is not likely, however that potential exists until the plume is fully remediated.

Other Risk/Exposure Information?

Site/Project Name:	Alaric Area GW Plume	
Criteria #2 – SITE/CONTAMINANT STABILITY (Weight Factor = 5)		
Describe the means/likelihood that contamination could impact other areas/media given current containment:		
Groundwater contamination migration appears to be under control at this site, both horizontally and vertically, through the use of the current P&T system in place.		
Are the contaminants contained in engineered structure(s) that currently prevents migration of contaminants? Is this structure sound and likely to maintain its integrity?		
The contaminants are not contained in an engineered structure, but are limited in mobility, through the use of a P&T system		
Are the contaminants in a physical form that limits the potential to migrate from the site? Is this physical condition reversible or permanent?		
The contaminants are mobile in groundwater, and a source remains, which continues to feed the contaminated groundwater plume.		
Are there institutional physical controls that currently prevent exposure to contamination? How reliable is it estimated to be?		
Institutional controls established and enforced by the Southwest Florida Water Management District, pursuant to Florida Administrative Code 40-D-3, serve to protect public health and ensure the integrity of the groundwater remedy. These requirements govern the installation of new wells that could be installed in the vicinity of the Site which could result in the exposure of individual to groundwater contaminants.		
Other information on site/contaminant stability?		
Due to the presence of contaminated source soils, the extent of contamination will only worsen over time. With the use of the P&T system, the site is able to mitigate the contaminated groundwater migration, but is costly and will need to operate until the source zone has been addressed.		
Site/Project Name:	Alaric Area GW Plume	
Criteria #3 – CONTAMINANT CHARACTERISTICS (Weight Factor = 3)		
<i>(Concentration, toxicity, and volume or area contaminated above health based levels)</i>		
List Principle Contaminants (Please provide average and high concentrations.):		
<i>(Provide upper end concentration (e.g. 95% upper confidence level for the mean, as is used in a risk assessment, or maximum value [assuming it is not a true outlier], along with a measure of how values are distributed {e.g. standard deviation} or a central tendency values [e.g., average].)</i>		
<u>Contaminant</u>	<u>*Media</u>	<u>**Concentrations</u>
PCE	GW	100,000 ug/L
TCE	GW	6,700 ug/L
Cis-1,2-DCE	GW	14,000 ug/L
Vinyl Chloride	GW	1,000 ug/L
Manganese	GW	860 ug/L
<i>(*Media: AR – Air, SL – Soil, ST – Sediment, GW – Groundwater, SW – Surface Water)</i>		
<i>(**Concentrations: Provide concentration measure used in the risk assessment and Record of Decision as the basis</i>		

SUPERFUND RESPONSE ACTION PRIORITY PANEL REVIEW FORM

for the remedy.)

Describe the characteristics of the contaminant with regards to its inherent toxicity and the significance of the concentrations and amount of the contaminant to site risk. *(Please include the clean up level of the contaminants discussed.)*

The primary contaminant drivers at the Alaric Site are chlorinated solvents including and derived from PCE in ground water. Investigative results are indicative of principal threat waste remaining in subsurface soils, and pose a lingering cancer and non-cancer risk to future residents and workers. Due to the high levels of contaminants found in ground water, were an exposure pathway completed, the cancer risk is very high, e.g. 1.4E-01 for a future adult resident. The cleanup goals for these PCE, TCE, cis-1,2-DCE, and vinyl chloride are 5, 5, 70, and 2 ug/L, respectively. As evidenced from the table above, each of these contaminants exist at levels multiple orders of magnitude above their respective cleanup goals.

Describe any additional information on contaminant concentrations which could provide a better context for the distribution, amount, and/or extent of site contamination. *(E.g. frequency of detection/outlier concentrations, exposure point concentrations, maximum or average concentration values, etc.....)*

See attached Figures 2-5 and 2-6

Other information on contaminant characteristics?

Site/Project Name: Alaric Area GW Plume

Criteria #4 – THREAT TO SIGNIFICANT ENVIRONMENT (Weight Factor = 3)

(Endangered species or their critical habitats, sensitive environmental areas.)

Describe any observed or predicted adverse impacts on ecological receptors including their ecological significance, the likelihood of impacts occurring, and the estimated size of impacted area:

Ecological receptors are not a component of this Site

Would natural recovery occur if no action was taken?

☐ Yes

☒ No

If yes, estimate how long this would take.

It appears unlikely that natural process will attenuate the contaminants at the Site at rates to be protective of human health and the environment. While VOCs do attenuate naturally, due to the presence of the source zone soils, indicative of principal threat waste, attenuation would not occur until the source of contamination was depleted.

Other information on threat to significant environment?

Site/Project Name: Alaric Area GW Plume

Criteria #5 – PROGRAMMATIC CONSIDERATIONS (Weight Factor = 4)

(Innovative technologies, state/community acceptance, environmental justice, redevelopment, construction

SUPERFUND RESPONSE ACTION PRIORITY PANEL REVIEW FORM

completion, economic redevelopment.)

Describe the degree to which the community accepts the response action.

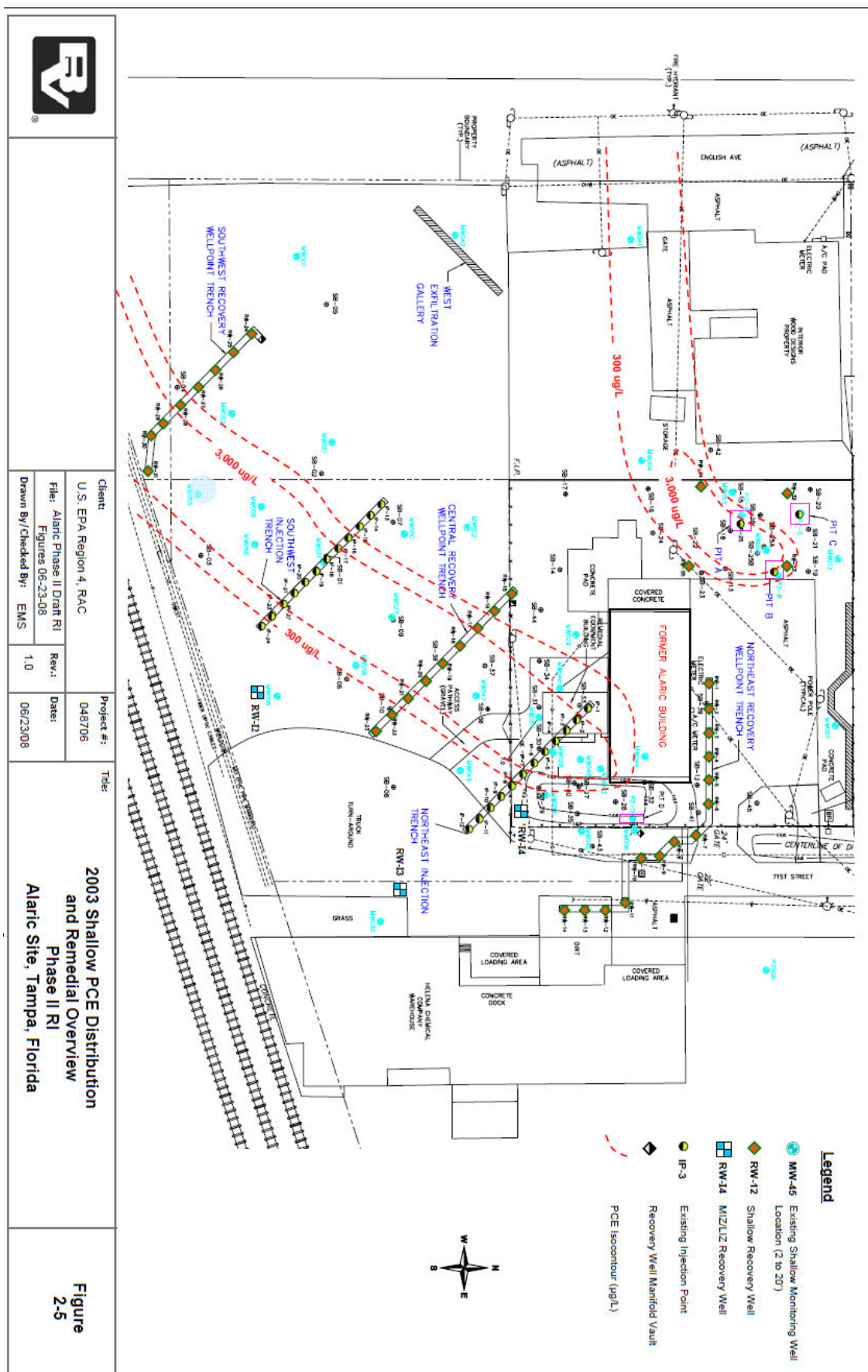
There were no comments during the public comment period for the AROD.

Describe the degree to which the State accepts the response action.

The State gave concurrence with the remedy selected in the AROD, and has participated on conference calls, updating the status of the RD. The current SSC in place will be closed out and a new SSC is being discussed with the State for the forthcoming RA.

Describe other programmatic considerations, e.g.; natural resource damage claim pending, Brownfields site, use of innovative technology, construction completion, economic redevelopment, environmental justice, etc...

There are no major programmatic considerations at this time for this Site. A CC was already achieved for this site in FY 2003



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